

ZEMLIČKA, J

20 May 1962 (j)

1

Synthetic reactions of dimethylformamide. II. The reaction of ketals with dimethylformamide and phosgene. Zdeněk Arnold and Jiří Zemlička (Czechoslov. akad. věd, Prague). Collection Czechoslov. Chem. Commun. 24, 788-90 (1959) (in English).—See C.A. 53, 4104a. Jiří Píchal

Distr: 4E2c(j)

II
1/1

Jiří

J. Zemlicka

Distr: hE2c(j)

General synthesis of β -chloroacrylaldehydes. Z. Arnold and J. Zemlicka (Czechoslovak, Akad. Sci. Prague). *Proc. Chem. Soc.*, 1958, 227. Substituted formamides with POCl_3 or COCl_2 can formylate carbonyl compds. to yield β -chloroacrylaldehydes, proceeding via the quaternary salt $[\text{R}'\text{CCl}:\text{CRCH}:\text{NMe}_2]\text{X}$; this is supported by independent synthesis of the salts from the corresponding dimethylaminoethylene deriv. The quaternary salts are readily hydrolyzed to β -chloroacrylaldehydes. By the former method the following $\text{R}'\text{CCl}:\text{CRCHO}$ are prepd. (R, R', % yield, and n_D^{20} given): H, Me, 38.5, 1.4820; Me, Me, 66.6, 1.4916; Me, Et, 77.0, 1.4871; H, Bu, 80.0, 1.4769; H, Ph, 47.1, 1.6166; Me, Ph, 90.7, 1.5873; $[\text{RR}' = (\text{CH}_3)_2]$, 46.6, 1.5162; $[\text{RR}' = (\text{CH}_3)_2]$, 54.1, 1.5225; $[\text{RR}' = (\text{CH}_3)_2]$, 65.2, 1.5227; $[\text{RR}' = (\text{CH}_3)_2]$, 63.1, 1.5248. By the latter method: H, H, 73.0, 1.4823 (prepd. from $\text{CH}_3\text{Na}(\text{CHO})$ and COCl_2); Me, H, 65.7, 1.4880; Et, H, 83.7, 1.4746; C_4H_9 , H, 79.2, 1.4718; Ph, H, 80.2, (m. 25-6°); PhCH_2 , H, 81.6, — (m. 32-3°). C. A. P.

ZEMLICKA, J.; SMRT, J.; SORM, F.

Nucleic acid components and their analogues. Part 19:
Synthesis of 3-methyl-6-azauridine-5'-phosphate and -pyrophosphate.
Coll Cz Chem 27 no.6:1462-1469 Je '62.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak
Academy of Sciences, Prague.

(1)

ZEMLICKA, J.; BERANEK, J.; SMRT, J.

CSSR

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of
Science, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 12, 1962,
pp 2784-2795

"Preparation and Methanolysis of Uridine, 6-Azauridine and 6-Azacytidine
O-Formyl Derivatives"

(3)

Zemlicka, Jan

CZECHOSLOVAKIA/Cosmochemistry, Geochemistry, Hydrochemistry.

Abs Jour : Ref Zhur -- Khimiya, No 10, 1958, 32082

Author : Jan Zemlicka

Inst : "Ustred. ustavu geol."?

Title : Geochemistry of Titanium in Weathering Process of Volcanic Rocks.

Orig Pub : Vest. Ustred. ustavu geol., 1956, 31, No 4, 180-193

Abstract : A hypergenesis zone of detrital rocks of volcanic origin (North of the Skrashina village in Most) was studied. The average content of TiO_2 is 7.5%. The maximum amount of TiO_2 is connected with the finest fractions (7.85%). Graphs of the dependence between the compounds of TiO_2 and Fe_2O_3 are presented. Ti was found in three forms: 1/ in the metastable form as $TiO_2 \cdot nH_2O$ soluble in dilute

Card 1/2

10

ZEMLICKA, J.

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11246.

Author : Stanek, J. and Zemlicka, J.

Inst :

Title : Oxidation of Several α -Substituted Alcohol Derivatives
by the Oppenauer Method.

Orig Pub: Chem Listy, 51, No 3, 493-496 (1957) (in Czech)

Abstract: A number of α -ketols and 1,2-glycols have been oxidized to the corresponding α -diketones by a modified Oppenauer procedure using Al-phenoxide (I) and p-benzoquinone (II) in anhydrous media (see M. Yamashita and T. Matsumura, J. Chem. Soc., Japan, 64, 506 (1943); R. L. McKee and H. R. Henze, J. Amer. Chem. Soc., 66, 2021 (1944); P. Ruggli et al, Helv. Chim. Acta, 29, 312 (1946)). The esters of α -hydroxy acids and of α -amino alcohols

Card : 1/3

7

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11246.

do not react under the above conditions. Preparation:
 0.1 mol of the substance to be oxidized is heated 4 hrs
 in 350 ml C_6H_6 with 0.05 mol I and 0.1-0.15 mol II (per
 hydroxyl group to be oxidized); the solution is filtered
 and extracted four times with 200 ml 5% NaOH and water,
 the C_6H_6 is distilled off, and the residue is distilled
 or recrystallized. The substance to be oxidized, the oxi-
 dation product, and the yield of the latter in % are given
 below: hydrobenzoin, benzil, 74; iso-hydrobenzoin, benzil,
 75; benzoin, benzil, 87; furoin, furil, 49; 1-phenyl-2-
 nitroethanol, resin, -; D-borneol, D-camphor, 76.5; benzyl
 alcohol, benzaldehyde, 31.1; cyclohexanol, cyclohexanone,
 29.8 (the reaction is accompanied by the self-condensation
 of cyclohexanone to yield 2-cyclohexenyl-cyclohexanone,
 bp 108-110°/3 mm, 12.4%). Acetone glycerine, 1,2- and

Card : 2/3

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry.

G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11746.

1,3-benzylidene glycerine, cinchonine, the methyl ester of mandelic acid, and the diethyl ester of tartaric acid do not react under the above conditions. Monobenzoic glycol ester (0.02 mol) on heating in 120 ml C_6H_6 (4 hrs) with I (0.02 mol) and II (0.02 mol) gives the dibenzoic ester of ethylene glycol, yield 40.7%, mp 71.5° ; on refluxing with I alone in C_6H_6 the yield is 93%. Benzaldehyde cyanohydrin (0.05 mol) on refluxing for 4 hrs in 400 ml C_6H_6 with I (0.025 mol) and II (0.075 mol) gives benzaldehyde-bis-(α -cyanobenzyl)-acetal, yield 10.8%, mp 194° .

Card : 3/3

8

RUBESKA, Ivan; SPACKOVA, Alena; ZEMLICKA, Jan

Use of semiquantitative spectrochemical analysis for geochemical examination of clay sediments. Sbor chem tech no.3, part 2:285-306 '59.

1. Ustredni ustav geologicky, Praha a Katedra mineralogie, Vysoka skola chemicko-technologicka, Praha.

RUBESKA, Ivan; SPACKOVA, Alena; ZEMLICKA, Jan

Use of semiquantitative spectorochemical analysis for geochemical examination of clay sediments. Sbor chem tech no.3, part 2:285-306 '59.

1. Ustredni ustav geologicky, Praha a Katedra mineralogie, Vysoka skola chemicko-technologicka, Praha.

ARNOLD, Z., ZEMLICKA, J.

Reaction of formamidine salts and their vinylogs with carbanions.
Coll Cz Chem 25 no.5:1302-1307 My '60.

1. Abteilung für organische Synthesen, Chemisches Institut,
Tschechoslowakische Akademie der Wissenschaften, Prag.

ZEMLICKA, J.

"Chemistry of nucleosides and nucleotides" by A.M.Michelson.
Reviewed by J.Zemlicka. Chem listy 58 no.11:1360-1361 N '64.

ZEMLICKA, J.

"Comprehensive biochemistry" by M. Florkin, E.H. Stotz. Reviewed
by J. Zemlicka. Chem listy 58 no.8:1002-1004 Ag '64

ZEMLICKA, J.; SMRT, J.; SOHM, F.

CSSR.

no academic degrees indicated

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of
Science, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No. 1, 1963,

"Nucleic Acids Components and Their Analogues. XXVII.
The Synthesis of 6-Azuaridine-5' Triphosphate"

(3)

ARNOLD, Z.; ZEMLICKA, J.

Synthetic reactions of dimethylformamides. Part 7: Production of
triformylmethane. Coll Cz Chem 25 no.5:1318-1323 My '60.

1. Abteilung für organische Synthesen, Chemisches Institut,
Tschechoslowakische Akademie der Wissenschaften, Prag.

ZENLICKA, J.; VLASEK, Z.

Semiquantitative spectrographic analysis of minor elements in underlying clays containing titanium. I. A preliminary report. p.210.
(PRAGUE, Vol. 32, no. 3, 1957, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions (REAL) LC, Vol. 6, no. 12, December 1957. Incl.

ZEMPLICKA, J.

TECHNOLOGY

Periodical: POZEMNI STAVBY. Vol. 6, no. 10, Oct. 1958.

ZEMPLICKA, J. Construction of family houses. p. 510.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass.

ZEMLICH, J. ; KRAZEK, A.; VLASEK, Z.

Use of ultrasonics for disintegration of rocks. p. 69.
PRAGUE. Ustredni ustav geologicky, VESTNIK, Praha. Vol. 27, nos. 3/4
5-6; 1952.

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 5, no. 12, December 1956.

JIRELE, Vratislav; ZEMLICKA, Jan

Hydrochemical and geochemical research of mineral waters of Frantiskovy
Lazne in 1957-1958. Sbor chem tech 4, no.2:277-393 '60.
(EEAI 10:9/10)

1. Ustredni ustav geologioky, Praha, Ustav nerostnych surovin, Kutna
Hora, a Katedra mineralogie, Vysoka skola chemicko-technologicka,
Praha.

(Mineral waters)

PITHA, J.; ZEMLICKA, J.

Nucleic acid components and their analogs. Pt.45. Coll
Cz Chem 29 no.2:410-418 F '64.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak
Academy of Sciences, Prague.

ZEMLA, Janina; ORLOWSKA, Irena

Fibrous dysplasia of the mandible in children. Pediat. Pol.
39 no.3:287-294, Mar'64.

1. Z Kliniki Chirurgii Stomatologicznej AM w Warszawie;
kierownik: prof.dr.med. M.Gorski.

*

ZEMLICKA, Josef

Automation of the breadmaking line from the technological viewpoint. Prum potravin 14 no.7:342-343 JI '63.

1. Vyskumny ustav mlynskeho a pekarenskeho prumyslu, Praha.

ZEMLIANSKII, N. I.

Zemlianskii, N. I., Prib, O. A., Slarypkina, IA. N.- "Oxidation of hydrocarbons with air oxygen induced by chlorine." (p. 1770)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1952, Vol. 22, No. 10

ZEMLIANSKII, V. A.

14703* (Problem of Chip Breaking.) K voprosy o struzh-
kodoblenii. V. A. Zemlinskii. Vestnik Mashinostroyeniia, v. 33,
no. 12, Dec. 1953, p. 77-82.
Calculation of chip breaking process; criterion of its deformation
which permits separation of curling and breaking zones. Dia-
grams, graphs, tables, 20 ref.

ZEMLICKA, Vl., MUDr. Lekar VUR, Zacler.

Cooperation of the Regional Direction of the Public health with
district physicians. Prakt. lek., Praha 34 no.11:254-256 5 June 54.

(PUBLIC HEALTH,

in Czech., cooperation of regional directions of pub.
health with district officers)

ZEMLIKMAN, E.A.; SKRYABIN, K.I., akademik.

On the life cycle of the bird-host trematoda *Cyanophallus affinis*
(Jameson et Nicoll, 1913). Dokl. AN SSSR 91 no.4:989-992 Ag '53.
(MLRA 6:8)

1. Akademiya nauk SSSR (for Skryabin).
2. Karelo-Finskiy gosudarstvennyy universitet Petrozavodsk (for Zemlikman).
(Trematoda) (Parasites--Birds)

ZEMLINA, A. G.

USSR / General and Special Zoology. Insects. Harmful
Insects and Arachnids. Pests of Fruit and Berry
Cultures. P

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64100.

Author : Zemlina, A. G.
Inst : The Far Eastern Branch, AS USSR.
Title : The Pear Snout Beetle (Rhynchites heros Roel.) -
A Garden Pest in the Primor'ye Primorskiy Kray.

Orig Pub: Tr. Dal'nevosto fil. AN SSSR, ser. zool. 1956,
3, (6), 151-161.

Abstract: The pear snout beetle develops (experiments in
the years 1951-1953) in one generation, and,
as a thermophile species, usually concentrates
in fruit plantings located on southern slopes.
Rh. heros is a substantial pear fruit pest in
the south of the Primorskiy Kray and in some

Card 1/2

65

USSR / General and Special Zoology. Insects. Harmful
Insects and Arachnids. Pests of Fruit and Berry
Cultures. P

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001964420004-1

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64100.

Abstract: years it causes the destruction of up to 60%
of the crop. Comparatively resistant pear
varieties are found among the Far Eastern pear
specie. A corresponding selection of varieties
and the application, for control of the pear
snout beetle, of 12% BHC dust or 5% DDT dust
against beetles and 25% soil BHC against larvae
is recommended. Tilling the soil and areas
around the trunks of the pear trees and garden
sanitary measures have a somewhat protection
value. -- B. V. Veroshchagin.

Card 2/2

ZEMLINA, A.G.

Apple blossom weevil *Anthonomus pomorum* L. in the Maritime Territory.
Soob.DVFAN SSSR no. 15:77-82 '62. (MIRA 17:9)

1. Gorno-tayezhnaya stantsiya Dal'nevostochnogo filiala Sibirskogo
otdeleniya AN SSSR.

ZEMLINA, A.G., kand.biol.nauk (Voroshilov-Ussuriyskiy)

Pear pests in the Maritime Territory. Zashch.rast.ot vred. i bol.
3 no.2:37-38 Mr-Ap '58. (MIRA 11:4)
(Maritime territory--Pear--Diseases and pests)

REMOLINA, A.G.; ANUFRIYEV, L.A.

The beetle *Ectinohoplia rufipes* Motsch., a new pest of ash in the Maritime Territory. Soob. DVTAN SSSR no. 12:153-155 '60.

(MIRA 13:11)

1. Dal'nevostochnyy filial Sibirskogo otdeleniya AN SSSR.
(Maritime Territory--Beetles)
(Ash (Tree)--Diseases and pests)

ZEMLINSKAYA, I. I.
USSR/Medicine - Oncology

FD-2566

Card 1/1 Pub. 17-19/23

Author : Zemlinskaya, I. I.

Title : Effect of synestrol on the development of experimental cancer in white mice

Periodical : Byul. eksp. biol. i med. 5, 67-70, May 1955

Abstract : Investigated the effect of subcutaneous injection of synestrol on the development of experimental Erlich's carcinoma in white mice which had received subcutaneous injections of ascitic fluid obtained from mice with the ascitic form of Erlich's carcinoma. Tables.

Institution : Obstetrics-Gynecology Clinic (Head - Prof A. M. Agaronov) of the Odessa Medical Institute imeni N. I. Pirogov (Director-Prof. I. Ya Deyneka)

Submitted : July 26, 1954 by N. N. Petrov, Member of the Academy of Medical Sciences USSR

ZEMLINSKAYA, I.I., kand.med.nauk

Donati's modified skin suture in ruptures and sections of the perineum.
Sov. med. 25 no.3:60-64 Mr '61. (MIRA 14:3)

1. Iz kafedry akusherstva i ginekologii pediatricheskogo i sanitarno-gigiyenicheskogo fakul'teta (zav. - prof. Ya.V.Kukolev) Odesskogo meditsinskogo instituta imeni N.I.Pirogova (direktor - zasluzhennyy deyatel' nauki prof. I.Ya.Deyneka).
(PERINEUM--RUPTURE) (SUTURES)

ZERLINSKAYA, I.I., kandidat meditsinskikh nauk

Diagnosis of metastatic cancer of the ovaries. Sov.med. 19
no.9:34-37 S '55. (MLRA 8:12)

1. Iz akushersko-ginekologicheskoy kliniki i lechebnogo
fakul'teta Odeskogo meditsinskogo instituta (dir. I.Ya.Deyneka)
(OVARIES, neoplasms
metastatic, diag.)

ZEMLINSKAYA, I.I., kandidat meditsinskikh nauk

Significance of functional preparation of the breasts in the prevention of cracked nipples. *Pediatrics* 39 no.5:24-28 S-O '56.

(MLRA 10:1)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. N.P. Verkhatskiy) pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov Odesskogo meditsinskogo instituta imeni N.I.Pirogova (dir. - prof. I.Ya. Daynaka)

(BREAST, diseases,

cracked nipples, prev. (Rus))

BABICHENKO, A.S.; ZEMLINSKAYA, Ye.I.

Practices in the Odessa Bristle and Brush Factory. Leg.prom. 15
[i.e. 16] no.6:46-47 Je '56. (MIRA 9:8)
(Odessa--Brooms and brushes)

S/081/62/000/001/046/067
B158/B101

AUTHORS: Khodzhayev, G., Zemlinskiy, E. Ye., Chernov, M. F.,
Kvasnikova, K. A., Kul'metov, A., Tsapenko, M. N., Usmanova,
D. A.

TITLE: Petroleum from fields in Southern Alamyshik

PERIODICAL: Referativnyy zhurnal. Khimiya, No. 1, 1962, 439-440,
abstract 1M79 (Uzb. khim. zh., no. 1, 1961, 55-64)

TEXT: Uzbekian petroleum from the field mentioned have low sulfur content, are resinous, have a paraffin base and have a composition approaching that of petroleum from paleogenic and neogenic beds in the same field.

The average clear fraction content is 35%, this boils at up to 300°C; the gas oil fraction (300-400°C) is 11-12%, light oils (400-460°C) 13% and asphalt (>460°C) 33.5%. The oils obtained are of low viscosity and require deparaffination. The solid paraffin yield (on petroleum) from fractions up to 460°C is \leq 5.1%, and in the individual narrow fractions
Card 1/2

Petroleums from fields in...

S/081/62/000/001/046/067
B158/B101

up to 20-21%. The paraffin is medium fusible. The total solid paraffin content is 10%. [Abstracter's note: Complete translation.]

Card 2/2

KHODZHAYEV, G.; ZEMLENSKIY, E.Ya.; CHERNOV, M.F.; KYASNIKOVA, K.A.;
KUL'METOV, A.; TSAPENKO, M.N.; USMANOVA, D.A.

Petroleum of the Yuzhnyy Alamyshik field. Uzb. khim. zhur. no.1:
55-64 '61. (MIRA 14:1)

1. Institut khimii AN UzSSR.
(Yuzhnyy Alamyshik--Petroleum)

ZEMLYANSKIY, N.I.

Combustion of hydrocarbons in chlorine. Nauk.zap.L'viv.un.
21:139-144 '52. (MLRA 10:7)
(Combustion) (Propane) (Butane)

ZEMLINSKIY, S.F.

33051. ZEMLINSKIĬ, S. F. Lekars-
vennye rasteniia SSSR. Moskva, Izd-vo
Moskovsk. ob-va ispyt. prirody, 1949.
354 p., illus., 16 col. plates. 164 refs.

ZEMLINSKIY, SAMUIL YEFIMOVICH

Lekarstvennyye rasteniya SSSR. Izd. 3., ispr. i dop.
Moskva, Medgiz, 1958.

608 p. illus., tables.

Includes Bibliographies.

ZEMLINSKIY, S.Ye.

Deceased 1957

Medical Industry

See IL C

ZEMLITSKIY, Ye.Ya.

New method of dispersion analysis by the centrifugation of highly dispersed systems and systems suspended in highly viscous media.
Koll.zhur. 23 no.6:699-705 N-D '61. (MIRA 14:12)

1. Khar'kovskiy zavod transportnogo mashinostroyeniya imeni V.A. Malysheva.

(Particle size determination)

ZEMLITSKIY, Ye.Ya.

New method of dispersion analysis by centrifugation. Koll. zhur.
27 no.2:186-192 Mr-Apr '65. (MIRA 18:6)

1. Khar'kovskiy zavod transportnogo mashinostroyeniya imeni
Malysheva.

ZEMLITSKIY, Ye. Ya.

Preventing the entrainment of a deposit by stream in centrifugation.
Koll. zhur. 27 no. 5:681-684 S-O '65. (MIRA 18:10)

1. Khar'kovskiy zavod transportnogo mashinostroyeniya imeni
Malysheva, V.A.

ZEMIJAK, Leopold, dipl. tehn. (Ljubljana)

Reform of technical education in Hungary. Nova proizvod 3/4:
197 '64.

SLIVNIK, J.; SMALC, A.; ZEMLJIC, A.

80-ampere electrolytic cell for the obtainment of elementary fluorine. Vest Slov kem dr 9 no.3/4:61-64 J1-D '63.

1. Nuklearni institut "Jozef Stefan", Ljubljana.

SLIVNIK, J.; ZEMLJIC, A.

Synthesis of bromotrifluoride in a glass apparatus. Vest Slov
kem dr 9 no.3/4:57-59 J1-D '63.

1. Nuklearni institut "Jozef Stefan", Ljubljana.

SLIVNIK, J.; BRCIC, B.; VOLAVSEK, B.; SMALC, A.; FRLEC, B.; ZEM LJIC, R.; ANZUR, A.; VEKSLI, Z.

On the synthesis of, and magnetic measurements on, xenon tetrafluoride.
Croat chem acta 34 no.3:187-188 '62.

1. "Jozsef Stefan" Institute for Nuclear Research, Ljubljana, Slovenia, Yugoslavia (for Slivnik, Brcic, Volavsek, Smalc, Frlec, Zemljic, and Anzur.) 2. Institute "Ruder Boskovic", Zagreb, Croatia, Yugoslavia (for Vekslj).

SLIVNIK, J.; VOLAVSEK, B.; MARSEL, J.; VRSCAJ, V.; SMALC, A.; FRLEC, B.;
ZEMLJIC, Z.

Synthesis of XeF_8 . Croat chem acta 35 no.1:81-82 '63.

1. Institut "Jozef Stefan", Ljubljana, Slovenia, Yugoslavia.

SAVICH-ZABLOTSKIY, B.K. [Savych-Zablots'kyi, B.I.], inzh.-elektrik
ZEMLYANYI, I.M. [Zemlianyi, I.M.], inzh.-elektrik

First rural remote control substation with 35/10 kv capacity
in the Ukraine. Mekh.sil'.hosp. 8 no.9:27-28 S '59.

(MIRA 13:1)

(Ukraine--Remote control)

YUGOSLAVIA/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research.

C-

Abs Jour : Ref Zhur Fizik , No 3, 1960, 5142

Author : Slivnih, J., Zenljii, A.

Inst : -

Title : Preparation of Uranium Samples for Mass Spectrometric Analysis

Orig Pub : Repts. 11 J. Stefan 77 Inst., 1958, 5, 49-51

Abstract : The authors describe a setup for the preparation of samples of UF_6 , intended for mass spectrometric isotopic analysis. The setup consists of the following basic parts: generator of elementary fluorine, reaction tube, and traps. The generator represents an electrolytic cell with electrolyte $KF \cdot 2HF$; the F_2 is directed to the reaction tube, heated to $540^\circ C$. At this temperature the fluoridation reaction terminates after ten minutes. The UF_6 produced condenses in the trap, which is cooled with dry ice. To prepare

Card 1/2

YUGOSLAVIA/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research

C-

Abs Jour : Ref Zhur Biol., No 3, 1960, 5142

80 mg of UF_6 approximately one hour is necessary. The
changeover of uranium to UF_6 amounts to approximately
92%. Ye. L. Frankevich

Card 2/2

- 13 -

ZEMLO, V. V.

Zemlo, V. V. "Poisoning by mixtures of tetraethyl lead", Sbornik nauch. trudov vrachey Mordov. ASSR, Saransk, 1948, pp. 124-130.

SO: U-3261, 10 April 53 (Letopis 'Zhurnal 'nykh Statey No. 11, 1949)

COUNTRY : Czechoslovakia G-2
CATEGORY :
ABS. JOUR. : RZhKhim., No. 1959, No. 86515
AUTHOR : Arnold, Z.; Zemlocka, J.
INST. :
TITLE : Synthetic Reactions of Dimethylformamide. II.
The Reaction of Ketals with Dimethylformamide
and Phosgene.
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,
No 3, 786-796
ABSTRACT : See RZhKhim, 1959, No 6, 19357.

CARD:

136

AMS

SOIL TEMPERATURE

3.5-208

551.525.4:551.506 .3(47)

of *Zemlova-Bouakova, Vera, Dlouhodože primary triplot pudy. (Averages of soil temperature over long periods.) Meteorologické Zpravy, 4(1-2):24-34, 1950. 9 figs., 4 tables. MH-EH- The National Meteorological Institute of Czechoslovakia has 20 stations at which soil temperature is measured. Extensive tables and charts give results from 4 such stations: Brno from 1931 to 1949, 0-200cm; Libeovic, Tabor and Klatovy from 1924 to 1948, 0-100cm. A detailed description of soil layers in these areas is added as well as indications regarding working methods. Subject Headings: 1. Soil temperature data 2. Czechoslovakia. - G.T.

ZEMLOWA, Janina

Transplantation of the spongiosa in three cases of damages of the mandible. Czasopismo stomat. 7 no.6:269-275 Je '54.

1. Z Kliniki Chirurgii Stomatologicznej Akademii Medycznej w Warszawie i Oddzialu Stomatologicznego Miejskiego Szpitala Chirurgii Urazowej w Warszawie. Kierownik Kliniki i Oddzialu: prof. dr M.Gorski.

(MANDIBLE, surgery,

*implantation of spongiosa)

(BONE TISSUE, transplantation,

*spongiosa, in mandibular defects)

(TRANSPLANTATION,

*spongiosa, in mandibular defects)

ZEMLVANY, FNU

USSR/Electricity - Motors, Induction

Sep 51

"Concerning G. I. Shturman's Article 'Open Squirrel Cages in Squirrel-Cages Induction Motors'," N. K. Arkhangel'skiy, A. A. Minin, K. A. Chefranov, Engineers, "Glavenergoneft"; G. V. Molchanov, Engr "Griproneftemash"

"Elektrichestvo" No 9, pp 81,82

The 1st group, from "Glavenergoneft", state that Shturman's method is quite unsatisfactory and cite expts conducted by Sinel'nikov and Zemlvanyy in the All-Union Elec Eng Inst, in which slotting of the end rings reduced the efficiency of the motors tested by 4.5-5% and the power factor by 17-19%, while increasing the starting torque by only 5-36%. Molchanov gives examples of successful application of Shturman's method.

PA 196T55

KRIVOSHEY, D.; DRAGUNOV, V.; TYSHKO, V.; KORENYAK, A., starishiy inzh. po tekhnike bezopasnosti; MOLCHANOV, A., rabochiy syr'yevogo tsekha; POVOLOTSKIY, B.; LOBACHEV, L.; SUKHANOV, A.; ZEMLYACHENKO, I.; KOZLOV, A.; POPENKO, F., inzh. (Moskva); SHAPIRO, A.

Editor's mail. Okhr.truda i sots.strakh. 5 no.8:32-33 Ag '62.

(MIRA 15:7)

1. Glavnyy inzh. shakhty "TSentral'naya", Krivoy Rog (for Kirvoshey).
2. Pomoshchnik glavnogo inzh. po tekhnike bezopasnosti shakhty "TSentral'naya", Krivoy Rog (for Dragunov).
3. Nachal'nik ventilyatsii shakhty "TSentral'naya", Krivoy Rog (for Tyshko).
4. Tomskiy podshipnikovyy zavod 5-GPZ (for Korenyak).
5. Kabluchnaya fabrika, g. Nerekhta (for Molchanov).
6. Predsedatel' zavodskogo komiteta Moskovskogo zavoda zhelezobetonnykh izdeliy No.7 (for Lobachev).
7. Transportnaya kontora tresta "Sterlitamakstroy", g. Sterlitamak (for Sukhanov).
8. Predsedatel' mestnogo komiteta gorodskoy tipografii, g. Michurinsk (for Zemlyachenko).
9. Predsedatel' komissii okhrany truda gorodskogo komiteta professional'nogo soyuza meditsinskikh rabotnikov, g. Yevpatoriya (for Kozlov).
10. Vneshtatnyy tekhnicheskyy inspektor Voronezhskogo oblastnogo soveta professional'nykh soyuzov (for Shapiro).

(Industrial hygiene)

ZEMLYACHKO, D.

[Let's overtake the United States of America] Nazdozhenemo
Spolucheni Shtaty Ameryky.] Lviv, Knyzhkovo-zhurnal'ne vyd-vo,
1957. 125 p. (MIRA 11:10)
(Stock and stockbreeding)

ZEMLYAK, Karpo Petrovich

Rozpovidi' pro semyrichku, 1959-1965. Kyjiv, "Radyanska Shkola", 1961.
156 P. illus., diagra, maps, port., tables.

1. Ukraine - Economic Policy - 1959-
2. Russia -

~~ZEMLYAK, Karp Petrovich; KRIVENKO, Grigoriy Prokopovich; NEZHNIYAPPA, V.Ya.,~~
redaktor; ~~MOBZHERAN, V.F.,~~ tekhnichnyi redaktor

[Land of the Donets] Krai donets'kiy. Kyiv, Dersh.uchbovo-pedagog.
vyd-vo "Radians'ka shkola," 1957. 185 p. (MIRA 10:8)
(Donets Basin--Coal mines and mining)

ZEMIYAK, Karp Petrovich; NEZHNIYAK, V.Ya. [Nezhnypapa, V.IA.], red.;
~~GORBUNOVA~~, N.M. [Horbunova, N.M.], tekhn. red.

[From railroad to space flight] Vid chavunky do reisiv u
kosmos. Kyiv, Derzh. uchbovo-pedagog. vyd-vo "Radiants'ka
shkola," 1963. 145 p. (MIRA 17:2)

ZEMLYAK, Karp Petrovich; NEZHNI PAPA, V.Ya. [Nezhnypapa, V.IA.], red.;
PIPA, L.D. [Pypa, L.D.], red. kart; GORBUNOVA, N.M. [Horbunova,
N.M.], tekhn. red.

[A story about the seven-year plan, 1959-1965] Rozpovid' pro
seryyrichku, 1959-1965. Kyiv, Derzh. uchbovo-pedagog. vyd-vo
"Radiants'ka shkola," 1961. 156 p. (MIRA 15:3).
(Russia--Economic policy)

ZEMLYAK, Karp Petrovich; KUCHMARENKO, Pavel Ivanovich; SLIN'KO, B., red.;
ZELENKOVA, Ye., tekhn.red.

[Manual for the construction foreman] Pamiatka brigadira-stroitel'ia.
Kiev, Gos.izd-vo lit-ry po stroit. i arkhitekt.USSR, 1960. 339 p.
(Building) (MIRA 13:7)

ZEMLYAK, Ya. [Ziamliak, IA.]

Toward our tomorrow. Rab.1 sial. 36 no.12:4-5 D '60.

(MIRA 13:12)

(Kirovsk District (Mogilev Province)--Rural conditions)

ZEMLYAK, Ya. [Ziamliak, IA.] (g.Orsha)

Cordial friendship. Rab.1 sial. 36 no.9:8-9 S '60. (MIRA 13:10)
(Orsha--Sewing machines)

ZEMLYAK, Yu. (g. Kishinev); MEL'NIKOV, L. (g. Kishinev).

~~Experimental~~ Experimental machine shops. Prom.koop. no.4:24-25 Ap '57.
(MIRA 10:7)

1. Nachal'nik proizvodstvenno-tehnicheskogo otdela Moldprom-
soveta (for Zemlyak).
2. Nachal'nik konstruktorskogo byuro (for Mel'nikov).
(Machine shops)

ZEMLYAK, Yu.; LIKHACHEV, V.

Reorganization in full swing. Most. prom. i khud. promys.
no.5:7-8 My '63. (MIRA 16:7)

1. Glavnyy inzh. Moldglavbyta, Kishinev (for Zemlyak).
2. Starshiy inzh. Moldglavbyta, Kishinev (for Likhachev).
(Moldavia--Service industries)

ZEMLYAK, Yu.

More food for the country. Prom.koop. no.6:49-50 Je'55. (MLBA 8:11)

1. Nachal'nik otдела pishchevoy promyshlennosti i zagotovok Moldavskogo promsoвета.

(Moldavia--Food industry)

ZEMLYAK, Yu.I.; SHOR, A.I.

Five more canning plants. Kons.1 ov.prom. 17 no.12:35 D '62.

(MIRA 15:12)

1. Glavnyy inzh. upravleniya mestnoy promyshlennosti pri Sovete
Ministrov Moldavskoy SSR (for Zemlyak). 2. Starshiy inzh. proizvodstvenno-
tekhnicheskogo otдела upravleniya mestnoy promyshlennosti pri Sovete
Ministrov Moldavskoy SSR (for Shor).

(Moldavia—Canning industry)

YEFIMENKO, G.G., inzh.; VOYTANIK, S.T., inzh.; YEFIMOV, S.P., inzh.; MACHKOVSKIY, A.I., inzh.; RUDKOV, A.K., inzh.; RUDKOVSKIY, G.I., inzh.; Primali uchastiye: KOVALEV, D.A.; GOTOVTSEV, A.A.; VASIL'YEV, G.S.; ZEMLYANOV, A.A.; KUKUSHKIN, S.N.; MATYNA, M.G.; LOVCHANOVSKIY, V.A.; KRAMNIK, T.A.; NECHESOVA, N.I.; MARTYENKO, V.A.; KURAKSIN, D.I.; LETYAGIN, N.L.

Intensifying the sintering process by the use of a special charge wetting device. Stal' 23 no.12:1061-1064 D '63. (MIRA 17:2)

1. Dnepropetrovskiy metallurgicheskiy institut, zavod im. Dzerzhinskogo i Yuzhnyy gornoobogatitel'nyy kombinat. 2. Dnepropetrovskiy metallurgicheskiy institut (for Kovalev, Gotovtsev, Vasil'yev, Zemlyanov, Kukushkin).
3. Zavod im. Dzerzhinskogo (for Matyna, Lovchanskiy, Kramnik, Nechesova).
4. Yuzhnyy gornoobogatitel'nyy kombinat (for Martynenko, Kuraksin, Letyagin).

DURNOV, V.K.; BABUSHKIN, N.M.; PUSHKASH, I.I.; Prinimali uchastiye:
KOLMOGOROV, A.V.; KLEPTSIN, V.G.; MASLENNIKOVA, E.G.;
GORYACHEVA, A.V.; BARAKHVOSTOV, V.S.; RASIN, B.S.; ZEMLYAKOV,
A.A.; BABOSHINA, G.V.

Distribution of the temperature of the hot blast in the
tuyere passage of the blast furnace. Stal' 25 no.3:205-209
Mr '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurg-
icheskoy teplotekhniki i Nizhne-Tagil'skiy metallurgicheskiy
kombinat (for Durnov, Babushkin, Pushkash).

ZEMLYAKOV, B.A., inah.

Mayer curve of the washability of coals. Ugol' 36 no.4:45-47 Ap
'61. (MIRA 14:5)

(Coal washing)

ZEMLYAKOV, B.A., starshiy prepodavatel'

Equation of the granulometric characteristics of coal. Izv.vys.
ucheb.zav.; gor.shur. no.8:134-138 '59. (MIRA 13:5)

1. Tomskiy ordena Trudovogo Krasnogo Znameni politekhnicheskii
institut imeni S.M.Kirova. Rekomendovana nauchnym seminarom
fakul'teta obogashcheniya i briktirovaniya ugley.
(Coal preparation)

AUTHOR: Zemlyakov, B.A. SOV/68-59-5-1/25

TITLE: About the Mechanical Set Up for the Removal of Filter
Cake from Disc Vacuo Filters (O mekhanizme s"yema keka
s diskov vakuum-fil'trov)

PERIODICAL: Koks i khimiya, 1959, Nr 5, pp 3-4 (USSR)

ABSTRACT: It is pointed out that the usual method of mounting the
knives for removing filter cake from the discs of vacuo
filters cannot secure a continuous efficient removal
because individual sectors of the filter shift from their
normal position and the clearance between the edge of the
knife and the disc becomes either too small (leading to
cutting of the filtering cloth) or too large (cake is
not properly removed). A method of mounting cutting
knives which makes them follow the position of the filter
disc and thus retain a constant clearance is proposed.
There are 2 figures and 4 Soviet references.

Card 1/1

ASSOCIATION: Tomskiy politekhnicheskii institut (Tomsk
Polytechnical Institute)

ZEMLYAKOV, B.A.

Filtration apparatus of concentration plants. Izv. TPI 126:113-116
'64. (MIRA 18:7)

ZEMLYAKOV, B.A., inzh.

Graphic presentation of the results of a particle-size analysis
of coals (for discussion). Nauch. trudy KuzNIIUgleobog. no.1:
139-146 '62. (MIRA 16:8)

1. Tomskiy politekhnicheskii institut.
(Coal--Analysis)

ZEMLYAKOV, B.A., inzh.

Improving the operation of disk-type vacuum filters. Nauch. trudy
KuzNIIUgleobog. no.1:86-90 '62. (MIRA 16:8)

1. Tomskiy politekhnicheskii institut.
(Filters and filtration)

SEELYAKOV, B.A.; BELOGLAZOV, N.K.

Distribution of combustible matter and ash in coals by particle size classes. Izv. Sib. otd. AN SSSR no.9:122-126 '61.
(MIRA 14:10)

1. Tomskiy politekhnicheskii institut.
(Coal-Analysis)

ZEMLYAKOV, B.A.; BELOGLAZOV, N.K.

Nomogram for calculating an efficient process of screening.
Fiz.-tekhn. probl. razrab. pol. iskop. no.4:153-154 '65.

(MIRA 19:1)

1. Politeknicheskii institut, Tomsk. Submitted March 9, 1965.

ZEMLYAKOV, B. F.

RAVDONIKAS, Vladislav Iosifovich, 1894-- Les gravures des bords du lac Onéga et de la mer Blanche. Moskva, Izdatel'stvo Akademii nauk SSSR, 1936-38. 2v. maps. (Akademiia nauk SSSR. Trudy Instituta antropologii, arkheologii i etnografii, t. IX-X) (44-45085)

GN7991P4R3

ZEMLYAKOV, G., inzh.

Unit for applying glue on wallpaper. Stroitel' no. 8:12 Ag '58.
(MIRA 11:8)

(Paper hanging)

ZEMLYAKOV, G., inzh.

The 3-588 mortar mixer with reversible blades. Na stroi. Mosk.
no. 1:24 Ja '59. (MIRA 12:1)

(Mixing machinery)

ZEMLYAKOV, G., inzh.

The S-562 puttying unit. Stroitel' no.1:19 Ja '59. (MIRA 12:3)
(Putty)

PAVLIDIS, A.K., inzh.; ZEMLYAKOV, G.A., inzh.; ALESHIN, N.I., inzh.

Machines for finishing operations. Mekh. stroi. 18 no.12:
21-23 D '61. (MIRA 16:7)

(Finishes and finishing)

ZEMLYAKOV, Ivan Petrovich; ZAVGORODNYI, V.K., inzh., retsenzent;
YEVSTAF'YEVA, N.P., red.; DOBRITSINA, R.I., tekhn. red.

[Machine parts made of capron] Kapron - material dlia detalei
machiny. Moskva, Mashgiz, 1961. 97 p. (MIRA 15:1)
(Nylon) (Machinery--Construction)

43771

S/653/61/000/000/027/051
1042/I242

112123
AUTHORS: Chukmasov, S.F. and Zemlyakov, I.P.

TITLE: Antifrictional and wear-resistant properties of caprone

SOURCE: Plastmassy v mashinostroyenii i priborostroyenii.
Pervaya resp. nauch.-tekhn. konfer. po vopr. prim.
plastmass v mashinostr. i priborostr., Kiev, 1959.
Kiev, Gostakhizdat, 1961, 318-324

TEXT: The frictional and wear properties of caprone were studied at the Dnepropetrovskiy metallurgicheskiy institut (Dnepropetrovsk Institute of Metallurgy). The moments of friction in bearings made of caprone, babbitt, bronze, and textolite were compared. The coefficient of friction of caprone can be reduced by lubrication with graphite or MoS₂. These lubricants are also recommended for the steel - caprone pair at low speeds. The coefficient of friction of the steel - caprone pair is higher than that of the steel - textolite

Card 1/2

E 31565-66 EWT(d)/EWT(m)/EWP(w) TJP(c) EWP(u)
ACC NR: AT6006216 SOURCE CODE: UR/0000/65/000/000/0143/0153

AUTHOR: Zemlyakov, S. D.

63
Br1

ORG: None

TITLE: The construction and analysis of a class of self-adjusting systems

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Tekhnicheskaya kibernetika
(Technical cybernetics). Moscow, Izd-vo Nauka, 1965, 143-153

TOPIC TAGS: mathematic analysis, algorithm, mathematic model, automatic control theory, control system design, nonlinear differential equation, nonlinear automatic control system

ABSTRACT: The author investigates a real automatic self-adjusting control system described in the general case by a system of nonlinear differential equations with variable coefficients, and constructs a model with specific characteristics corresponding to the requirements of the real system. The aim of self-adjustment is to maintain the characteristics in the real system close to those of the model. This may be achieved by readjusting the parameters of the control system, the structure of the control system, or both. In the general case, the model may have a variable structure and may be described by nonlinear differential equations with variable coefficients. The author selected a standard model
Card 1/2

L 31565-66

ACC NR: AT6006216

2

consisting of a filter, the dynamic characteristics of which met with those of the real system. The error between the coordinates of the real system and the model was employed as the information needed to readjust the parameters of the control system. The problem of the construction and investigation of the self-adjusting system in this case is reduced to finding and constructing algorithms of the variation of control system parameters, which lead to a reduction in the errors between the coordinates of the model and the real system to the minimum possible value in the entire range of variations of the coefficients of the real system. Orig. art. has: 9 figures and 34 formulas.

SUB CODE: 12, 13 / SUBM DATE: 05Nov65 / ORIG REF: 004 / OTH REF: 001

Card 2/2 *LC*

S/081/62/000/017/091/102
B177/B186

AUTHORS: Chukmasov, S. F., Zemlyakov, I. P.

TITLE: Some results from research on the anti-friction and wear-resistant properties of caprone

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 545, abstract 17P85 (In collection: Plastmassy v mashinostr. i priborostr., Kiyev, Gostekhizdat USSR, 1961, 318 - 324)

TEXT: Comparative data are quoted for the values of wear-resistance and coefficient of friction under different operating states and conditions of lubrication where anti-friction bearings are composed of textolite, bronze, caprone and metallic shells lined with caprone. The possibility and advantages of using caprone are shown for bearings running either without lubrication or when lubricated by oil, water and solid lubricants, at working temperatures not higher than 140°. [Abstracter's note: Complete translation.]

Card 1/1

37838

8/123/62/000/008/010/016
A004/A101

15.8080

AUTHORS: Chukmasov, S. F., Zemlyakov, I. P.

TITLE: On some results of investigating the antifriction and wear-resisting properties of caprone

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 8, 1962, 37, abstract 8A264 (V sb. "Plastmassy v mashinostr. i priborostr.", Kiyev, Gostekhizdat UkrSSR, 1961, 318-324)

TEXT: The authors describe the methods and results of comparative tests of slide bearings from caprone and other materials under different friction and lubrication conditions. Based on the test results the following conclusions are drawn: 1. Lubricated caprone bearings do not show inferior operation characteristics than babbitt and bronze bearings. As lubricants for caprone bearings the authors recommend industrial, machine or turbine oil of a comparatively low viscosity (E-2 - E-6). 2. Ordinary water may be used for the lubrication and cooling of caprone slide bearings. The friction coefficient value of steel on caprone in a water bath is twice lower than the friction coefficient of the same materials during dry friction. 3. Under the testing conditions the

Card 1/2

On some results of investigating ...

S/123/62/000/008/010/016
A004/A101.

resistance to wear of caprone in dry friction on steel was twice as high as that of textolite, and exceeded the wear resistance of bronze by many times (100 - 120 times). 4. Metallic bushings and bearing bushes coated with thin caprone films operate fully satisfactory if the coating is of good quality. 5. The friction coefficient depends to a considerable extent on the presence of solid particles between the friction surfaces (abrasion products and foreign dust-like impurities). A particularly marked effect on the friction coefficient and the nature of wear is shown by abrasion products in the friction of bodies whose surfaces are of the same hardness and structure. This effect is sharply diminished for coupling of hard and soft surfaces. Thus, e.g., in the friction of steel on bronze and bronze on cast iron the elimination of abrasion products reduced the friction coefficient by 10 - 15%, while in couplings of steel with steel and bronze with bronze this reduction amounted to 30 - 40%. The presence of solid particles between the friction surfaces hardly affects the friction process of steel on caprone. 6. Caprone bearings will satisfactorily operate both without and with lubrication by oils, water and solid lubricants, if the operating temperature does not exceed 140°C.

[Abstracter's note: Complete translation]

Card 2/2

ZEMLYAKOV, Ivan Petrovich; ALAVERDOV, Ya.G., inzh., red.; SMIRNOVA,
G.V., tekhn.red.

[Kapron and its uses in technology] Kapron i ego primeneniye
v tekhnike, Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
lit-ry, 1960. 54 p. (MIRA 13:6)
(Nylon)

SOV/122-59-5-7/32

AUTHORS: Chukmasov, S.F., Doctor of Technical Sciences, Professor,
Zemlyakov, I.P., Engineer, and Shostak, T.I., Engineer

TITLE: The Physical and Mechanical Properties of Cast Nylon
(Fiziko-mekhanicheskiye kharakteristiki lit'ya iz kaprona)

PERIODICAL: Vestnik mashinostroyeniya, 1959, Nr 5, pp 31-32 (USSR)

ABSTRACT: Tests are reported designed to determine the properties of cast nylon components. Standard specimens were made with equipment of the "Kommunar" Works in Zaporozh'ye and the Dnepropetrovsk Works for Press Working Machinery (Dnepropetrovskiy zavod pressovogo oborudovaniya). The effect of normalising in boiling water was examined. The moisture resistance was determined in accordance with GOST-4650-49 by a 24-hour immersion test in distilled water. The shrinkage was determined on standard specimens of 100 mm diameter and 4 mm thickness. The Brinell hardness was determined according to GOST-4670-49 with a 5 mm diameter ball

Card 1/2

SOV/122-59-5-7/32

The Physical and Mechanical Properties of Cast Nylon

under a 50 kg load. Nylon fabric waste and resin components were tested after different normalising treatment lengths. The specific impact value was determined according to GOST-46-47-55. Static bending strength was measured on beams of 120 mm length and a cross-section of 10 x 15 mm, following GOST 46-48-56. Tension tests were carried out in accordance with GOST 46-49-55 and the elastic modulus in accordance with GOST 46-46-49. The mean value of moisture absorption is 0.32 g/m^2 , the casting shrinkage is 2.2%, the Brinell hardness is 6, the Izod value is 28 kgm/cm^2 , the compressive strength is 800 kg/cm^2 , the bending strength is 500 kg/cm^2 , the tensile strength is 440 kg/cm^2 and the elastic modulus 14.5 thousand kg/cm^2 . Many subsidiary factors are responsible for variability of these properties. There are 3 figures.

Card 2/2

ZEMLYAKOV, L.P.

Automatisation at the Morkle Sugar Refinery. Sakh. prom. 32 no. 34.
46-51 Mr '58. (MIRA 11:4)

1. Morkenskiy sakharany zavod.
(Morka--Sugar industry--Equipment and supplies)
(Automatic control)

L 06393-67 EWT(d)/ENP(v)/EWP(k)/EWP(h)/EWP(l)

ACC NR: AP6010282

SOURCE CODE: UR/0103/66/000/003/0070/0077

AUTHOR: Zemlyakov, S. D. (Moscow); Rutkovskiy, V. Yu. (Moscow)

ORG: none

TITLE: Synthesis of an adaptive control system with a reference model

SOURCE: Avtomatika i telemekhanika, no. 3, 1966, 70-77

TOPIC TAGS: self adaptive control, automatic control theory

ABSTRACT: A generalized adaptive control system defined by a nonlinear differential equation with variable coefficients is analyzed. The analysis emphasizes the improvement of the nonsensitivity of the system to a variation in its parameters. A filter, also defined by a differential equation, was adopted as a reference model. Lyapunov's direct method was used to synthesize the readjustment algorithms of the regulator's coefficients. In certain ranges, the coefficients of the closed-loop system of the main circuit deviate from the coefficients of the reference model. In those deviation ranges, the relay components provide for an asymptotic approximation of the motion of the main circuit to the motion of the reference model. A sliding regime is provided in a certain region of the phase space of the mismatch error and of its derivatives. The solution which satisfies the stability conditions is asymptotically stable in the whole.

Orig. art. has: 50 formulas.

SUB CODE: 13,22.09/

SUBM DATE: 20Jan65/

ORIG REF: 007/

OTH REF: 003

Card 1/1 *AK*

UDC: 62-506

KUDRYAN', A.P.; ZEM.YAKOVA, I.V.

Effect of vertical movements on the evolution of frontal zones.

Trudy OGMI no.23:81-84 '61.

(MIRA 16:6)

(Meteorology)

ZEMLYAKOV, V.M.

Atmospheric pressure and winds over the Black Sea. Trudy Ukr.NIGMI
no.7:183-195 '57. (MIRA 11:4)
(Black Sea--Atmospheric pressure) (Black Sea--Winds)